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# GLAST Monthly PSR

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## Ground System/Mission Ops

June 2003

**Mike Rackley**  
*GLAST Ground Sys/Ops Manager*

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# Accomplishments

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- ▶ ***Held Ground System Requirement Review Dry-run #1 on June 26***
  - *Ground System elements presented GSSR slides*
  - *Updated slides due to July 7, 2003*
- ▶ ***Continuing to work documents needed for issuance of the MOC RFP***
  - *SOW was baselined out-of-board*
  - *MOC requirements (in Ground System Requirements Document) was reviewed at June 20th CCB*
    - *Document resubmitted to CCB to address comments from meeting*
    - *Baselining of document expected at July 1 CCB*
- ▶ ***GDS MAR Document approved by project at June 20<sup>th</sup> CCB***
- ▶ ***Established presence in Building 14***
  - *D. Small moved to room N282*



# Accomplishments

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- ▶ ***Distributed review version of Updated Ops Concept Document***
  - *Comments expected on July 9th*
- ▶ ***First draft of the complete Ground Sys Requirements Document (GSRD) was distributed***
  - *Comments were expected on June 27*
  - *Meeting was setup for GLAST Project Office on June 25*
    - *Meeting support by operation elements and Mark Melton*
- ▶ ***Continued to review of and discussions on Spectrum's two simulators (CTS & MTS)***
  - *Comment collection for both simulators is in progress*



# Accomplishments

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- ▶ ***Supported GBM IOC PDR/TIM in Huntsville 5/6-7/03***
- ▶ ***Supported LAT CDR/ LAT IOC TIM 5/12-15/03***
  - *Technical Interchange discussions include:*
    - *GDS/ IOC schedule review*
    - *Instrument/MOC Interface Definitions*
    - *Mnemonic Naming Conventions*
    - *Ops Product Generation/Validation (Procs and Displays)*
    - *Telemetry and Command Data Base Process/Approach*
    - *Ops Simulations*
    - *Instrument test data*
    - *Scenario during L&EO*
    - *Burst Alert Processors (BAP's) in MOC*
    - *Updated Operations Concept Document and Ground System Requirements Document*



# Issues



## ► ***Spacecraft/instrument issues on our radar:***

- *Increases in dump time requirements if HK rate increases above about 40 kbps*
  - *Spectrum proposes to go to 51 kbps, bumping us up from a science driven dump time of 26 minutes/day to 35 minutes/day (about one extra pass)*
  - *With operations needing to schedule about 100% margin on contacts (giving us 6 contacts/day), we might be OK – we loose one contact of margin*
- *Instrument simulator requirements/capabilities relative to mission ops simulations needs, and how the simulators would be integrated with with MTS (and maintained)*

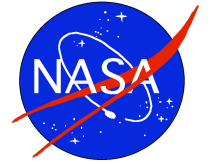
## ► ***Finalization of MOC contract award to Goldbelt Orca***

- *SOW done, need to baseline MOC requirements, Need MOC Acquisition Plan signed by Project Manager, need RFP out ASAP*



# Issues

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## ► **Reevaluating two latency requirements**

- *Data processing: 72 hours end-to-end OK, but 36 hour allocation to spacecraft leaves too little for data transfer and processing on ground*
- *Burst Alert Message handling: Cannot achieve 7 second end-to-end requirement with first message – maybe the “85% of the time” caveat saves us?*
  - *White paper is currently being developed that will address both issues.*



# Upcoming Events

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- ▶ ***KU- Band Operations Trade Study***
  - *Received ROM handling Ku- Band data*
    - *4 options were given*
  - *Study be delivered to Ground Systems Manager - July 7, 2003*
- ▶ ***Ground System SRR Dry # 2 scheduled for July 9th***
  - *Location: Building 16 room 236*
  - *Time: 11:00 am – 7:00 pm*
- ▶ ***Ground System SRR scheduled for July 22nd***
  - *Location: GSFC Visitor Center*
  - *Time: 8:30 am – 6:00 pm*
    - *Boxed lunch to be served at review*
- ▶ ***Complete Ground System Requirements Document***
  - *delivery to CM July 11*



# Rolling Wave Schedule

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## ► ***Changes from May PSR***

- *Ground System Requirements Review – July 22, 2003*
- *Ground System Critical Design Review – July 9, 2004*
- *Ground System Project Management Plan – July 30, 2003*
- *Operations Concept Document Rev. 1 – July 30, 2003*
- *Ground System Requirements Document SSR Ver. – July 22, 2003*
- *GBM IOC CDR – October 22, 2003*
- *GBM IOC (DA/MO) Release 1 – October 1, 2004*